

Title (en)  
ANALOG SENSOR WITH DIGITAL COMPENSATION FUNCTION

Title (de)  
ANALOGSENSOR MIT DIGITALER KOMPENSATIONSFUNKTION

Title (fr)  
CAPTEUR ANALOGIQUE DOTÉ D'UNE FONCTION DE COMPENSATION NUMÉRIQUE

Publication  
**EP 3063514 A1 20160907 (EN)**

Application  
**EP 14858032 A 20141031**

Priority  
• CN 201320685865 U 20131101  
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• CN 2014089984 W 20141031

Abstract (en)  
[origin: WO2015062535A1] An analog sensor (100, 500, 600, 700, 800, 900) with digital compensation function comprises: a deformation part (102) generating a deformation according to a pressure sensed by the analog sensor (100, 500, 600, 700, 800, 900), a strain gauge (104) connected to the deformation part (102) and generating a change in the resistance according to the deformation, a strain gauge bridge (106) connected to the strain gauge (104) and transferring the change in the resistance of the at least one strain gauge (104) to output a first analog signal, an analog-to-digital conversion module (108, 508, 708, 808, 908) connected to an output of the strain gauge bridge (106), receiving the first analog signal from the strain gauge bridge (106) and converting the first analog signal to a first digital signal, where the first analog signal is an analog signal representative of weight, an analog output port (116) for outputting a second analog signal, and a signal processing and output circuit (110, 510, 610, 710, 810, 910) connected between the output of the analog-to-digital conversion module (108) and the analog output port (116), compensating and converting the first digital signal into the second analog signal. The analog sensor (100, 500, 600, 700, 800, 900) may achieve high-accuracy compensation while keeping the interfaces of the analog weighing sensor to be simple.

IPC 8 full level  
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